

CLAIMS

1. Method for the manufacture of hollow bodies with a gas barrier coating, in particular containers made of PET, with a coating based on polyvinyl alcohol, where the hollow body of the surfaces to be treated is subjected to a preliminary treatment to increase the surface energy, coated and then dried, characterized by a multi-step preliminary treatment, where the hollow body is electrostatically discharged after the increase in the surface energy.

2. Method according to Claim 1, where the surface energy is increased to a value above 60 mN/m, preferably above 70 mN/m.

3. Method according to Claim 1 or 2, characterized in that the surface energy is increased by flaming.

4. Method according to one of Claims 1-3, characterized by an additional preliminary treatment with a fat dissolving agent, in particular ethyl alcohol, which preliminary treatment is carried out before the treatment to increase the surface energy.

5. Method according to one of Claims 1-6 [sic; 4], characterized in that the coating is carried out by swelling with the coating agent.

6. Method according to one of Claims 1-5, characterized in that the drying is carried out with warm, dehumidified air at a temperature of less than 60°C, preferably at 45°C, and with a water content of preferably less than 3 g/m³.

7. Device for the manufacture of hollow bodies (2) with a gas barrier coating, in particular containers made of PET, in particular with a polyvinyl alcohol-based coating, with a device (8) to increase the surface energy of the surface to be coated, a coating device (10) and a dryer (14), characterized by a multi-step preliminary treatment section (6) with a device (9) for electrostatically discharging the surface (2c) to be treated, which device is arranged after the device (8) to increase the surface energy.

8. Method according to Claim 7, characterized in that the device (9) for electrostatically discharging is an air shower with ionized air.

9. Method according to Claim 7 or 8, characterized in that the preliminary treatment section (6) contains a device (7) to degrease the surface (2c) to be coated, which device is arranged before the device (8) to increase the surface energy.

10. Method according to one of Claims 7-9, characterized by a film formation section (13), which is arranged between the coating device (10) and the dryer (14).

11. Method according to one of Claims 7-10, characterized in that the dryer is a warm air dryer and contains a dehumidification device (15) for the dryer air.

12. Method according to one of Claims 7-11, characterized in that a second coating device (16) follows immediately after the dryer (14) for drying the gas barrier layer, for applying an additional layer which covers the gas barrier layer, and in that an additional dryer (17) for the second layer follows.